

**REMARKS**

This paper is responsive to the Final Office Action dated June 4, 2003, having a shortened statutory period set to expire on September 4, 2003 in which,

Claims 1-13, 33 and 35 were pending; and

Claims 1-13, 33 and 35 were rejected.

No claims have been added or canceled in the present response. Claim 1 has been amended. Accordingly, claims 1-13, 33 and 35 remain currently pending in the present application.

**Rejection of Claims under 35 U.S.C. §103**

In the present Office Action, claims 1-13, 33 and 35 were rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 6,457,050 issued to Cowan et al. (hereinafter, "**Cowan**") in view of United States Patent No. 5,999,286 issued to Venkatesan (hereinafter, "**Venkatesan**"). While not conceding that any of the Examiner's cited references qualify as prior art, but instead to expedite prosecution, Applicants have chosen to traverse in part and overcome in part the Examiner's rejections as follows. The following arguments are made without prejudice to Applicants' right to establish, for example in a continuing application, that one or more of the cited references do not qualify as prior art with respect to an invention embodiment currently or subsequently claimed.

With respect to Applicants' claims 1, 33 and 35, the present Office Action states that **Cowan** discloses, "route generator 68 (Fig. 6) performs dynamic restoration by using dynamic route generator 25 (Fig. 4) to determine an optimal restoral route for each impacted trunk (dynamically identifying physical path connecting intermediate nodes). When a restoral route is determined, route generator 68 establishes the restoral route by connecting specific switching nodes 12 (establishing virtual path by dynamically configuring a set of connections between nodes). See col. 11, line 50 to col. 12, line 20." Applicants will assume for the purpose of this response that in the above-quote passage

the Examiner intended to indicate that *Cowan* discloses, “dynamically discovering a physical path from said first node to said second node” as claimed.

The present Office Action further states with respect to claims 1, 33 and 35 that,

Venkatesan discloses, in Fig. 7, when a traffic connection of capacity 100 units between a source node S (a first node) and a destination node D (a second node) breaks, source node S (the first node) sends an explore message 70 (a message) to destination node D via tandem nodes T1, T2, T4, T4 (intermediate nodes) which are described in Fig. 8, 9 (sending a message from the first node to the second node). See col. 6, lines 57-65 & col. 7, lines 20-35. The explore message 70 is eventually received at destination node D as described in Fig. 11, Figures 11, 13 and 14 show that destination node D sends a command message 100 back to source node S via tandem nodes T1-T4 which establishes a physical path...(identifying intermediate nodes comprising physical path in response to sending of message). See col. Lines 1-10 & lines 35-45, & col. 9, lines 20-35.

Since Cowan et al. refers to a method [of] dynamically restoring [a] connection, therefore; it would have been obvious to one of ordinary skill in the art to modify the Cowan et al. by adding the features of sending the explore message to establish a physical connection. The source node can send a request message to destination node via intermediate nodes for establishing an alternate physical path when a main path breaks.

Applicants respectfully disagree. Applicants submit that the Examiner’s cited references, neither alone nor in permissible combination, teach, show, or suggest, “dynamically establishing said virtual path by dynamically configuring a set of connections between said first node, said second node, and said intermediary nodes, if any, using intermediary links of said plurality of links by sending a reply message in reply to said message over said intermediary links” as claimed (Applicants’ claim 1, as currently amended).

Applicants respectfully submit that *Cowan* and *Venkatesan* each teach centralized systems for restoring communications within a network as distinguished from the claimed distributed embodiments of Applicants’ invention which require, for example, the dynamic configuration of a set of connections between nodes by, “sending a reply message in reply to said message over said intermediary links.” (Applicants’ claim 1, as currently amended) More specifically, *Cowan* teaches at column 6, lines 4-5 that, “RTR Manager 32 also provides centralized control of the RTR 10 system.” (emphasis

supplied) Similarly, at column 9, lines 17-27 (emphasis supplied), *Venkatesan* teaches that ,

The distributed telecommunications network alternate paths that the present invention constructs begin from source node, S, following the completion of the return phase, as shown in FIG. 15. Source node S executes the results of the maximum flow determination process and the alternate routes discovered as appears in FIG. 16. The alternate route of FIG. 16 restores 100 units of traffic. Using a maximum flow process assures that the amount of traffic that the present invention restores in the alternate route or subnetwork that the present invention generates will be maximum possible for the given network and traffic conditions.

Applicants therefore respectfully submit that as is clearly illustrated above, the physical path of *Venkatesan* is established by a source node within a maximum flow process phase following the completion of the return phase and associated command message transmission(s). Accordingly, the described physical path cannot be established by the transmission of a command message from destination node to source node via tandem nodes as maintained by the Examiner.

Column 11, line 50 to column 12, line 20 of *Cowan*, cited as teaching the described “establishing [said] virtual path by dynamically configuring a set of connections,” teaches in relevant part that, “When a restoral route is determined, route generator 68 identifies each port on each DXC 12 that is needed for the restoral route and formulates commands needed to implement the route which generally comprise port connects and disconnects in DXCs 12. These commands are in a generic format, in that they refer to DXC 12 devices and ports in a generic manner. These generic commands will be translated to actual commands needed for specific DXC 12 by the NIFTEs 46.”

Applicants further respectfully submit that while the cited portion of *Cowan* teaches the formulation of commands needed to implement a route and the translation of generic commands into actual commands, it fails to teach, show, or suggest, actually “dynamically configuring a set of connections between said first node, said second node, and said intermediary nodes, if any” as claimed (Applicants’ claim 1, as currently amended).

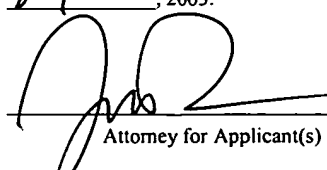
Moreover, Applicants respectfully submit that in citing Figures 4 and 6 of *Cowan* generally as teaching, “dynamically discovering a physical path from said first node to

said second node," the Examiner has failed to cite that portion of the reference he believes teaches, shows, or suggests each element of Applicants' claim with adequate specificity as required by 37 C.F.R. §1.104(c)(2). Applicants additionally submit that the Examiner's statement that "Cowan et al. refers to a method [of] dynamically restoring [a] connection, therefore; it would have been obvious to one of ordinary skill in the art to modify the Cowan et al. by adding the features of sending the explore message to establish a physical connection" without more, is insufficient to teach, show, or suggest the combination of *Cowan* and *Venkatesan*. Consequently Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a).

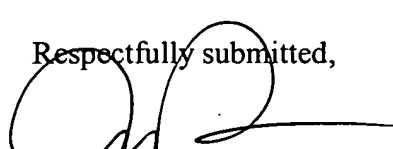
Applicants' claims 2-13 depend directly or indirectly from claim 1 and are therefore allowable for at least those reasons stated for the allowability of claim 1. Applicants' claims 33 and 35 contain one or more limitations substantially similar to those described with respect to Applicants' claim 1 and are therefore allowable for at least those reasons stated for the allowability of that claim.

### CONCLUSION

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5080.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: MAIL STOP AF, COMMISSIONER FOR PATENTS, P. O. Box 1450, Alexandria, VA 22313-1450, on <u>8-4</u> , 2003.	
 Attorney for Applicant(s)	<u>8-4-03</u> Date of Signature

Respectfully submitted,

  
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